

Work Order ID 58471

May 7, 2010 10:23:36 AM



Page 1

Item ID: D412-702-305

Accept



Setup

Start



Revision ID:

Item Name: Harness Assembly

Stop



Start Date: 07/05/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 14/05/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:



Date: 07/05/07 Tooling:

Date:

Run

Start



QC:

Date: SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

DSI 9511

A

100



Small Fab

Memo

0.00

Small Fab

Assemble as per dwg ICA D412-702 p.49

110



QC5- Inspect part completeness to step on W/O

0.00

QC

Quality Control

120



Packaging

Packaging

Memo

0.00

Identify with P/N & CHG# and pack for shipping as per PPP D412-702-305

CHG001

Location: 267

PPP Rev: _____

Work Order ID 58471

May 7, 2010 10:23:36 AM



Page 2

Item ID: D412-702-305

Accept



Setup Start



Revision ID:

Item Name: Harness Assembly

Stop



Start Date: 07/05/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 14/05/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start



QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

Sequence ID/
Work Center IDOperation
Description

130



QC

Quality Control

Set Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

Picklist Print

May 7, 2010 10:23:40 AM

Page 1

Work Order ID: 58471



Parent Item: D412-702-305



Parent Item Name: Harness Assembly

Start Date: 07/05/2010

Required Date: 14/05/2010

Comments: IPP Rev:A new issue DD 10.04.30 verified:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	---------------	----------------	--------

D3573-1



Manufactured

No

100

Each

21.0000

1

Adapter

Location

ST244

Loc Qty

21

45926

2

55680

9

57222

10

D4088-041



Manufactured

No

100

Each

0.0000

1

Shoulder Harness

MS24693-S273



Purchased

No

100

Each

840.0000

Screw

Location

ST288

Loc Qty

840

100151

Loc Code

AN960JD10LL



Purchased

No

100

Each

4,479.000

4

Washer

Location

ST349

Loc Qty

4479

19085

472

19600

4007

Loc Code

4

4

Picklist Print

May 7, 2010 10:23:40 AM

Page 2

Work Order ID: 58471



Parent Item: D412-702-305



Parent Item Name: Harness Assembly

Start Date: 07/05/2010

Required Date: 14/05/2010

Comments: IPP Rev:A new issue DD 10.04.30 verified:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Qty Issued	Date Issued	Status
MS21042L3 		Purchased		No		100	Each	1,673.000	4			

Nut

Location	Loc Qty	Loc Code
ST300	1673	
113537	20	
113644	653	
114523	1000	



EB 0105/17

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D412-702 REV. E AND
INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D412-702 REV.3

REF TCCA STC SH04-7
REF FAA STC SR01997NY
REF EASA STC EASA.I.M.R.S.00710

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SUBJECT TO AMENDMENT
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WORK ORDER

NO. 58471

BS105-07

This service instruction adds several kits equipped with improved inertia reels:

The Dart D412-702-341 13-Man Shoulder Harness Kit provides 3-point harnesses with inertia reels and joined lap and shoulder belts for all 13 passenger seating positions in the aircraft cabin. The kit also contains hardpoints for securing the harnesses. The harnesses for this kit meet the requirements of TSO-C114 and replace the existing lap belts. This kit should be installed similar to the D412-702-041B kit, as detailed in Table 1 of this service instruction.

The Dart D412-702-343 5-Man Forward Facing Shoulder Harness Kit provides 3-point harnesses with inertia reels and joined lap and shoulder belts for the 5 forward facing seating positions in the aircraft cabin. The kit also contains hardpoints for securing the harnesses. The harnesses for this kit meet the requirements of TSO-C114 and replace the existing lap belts. This kit should be installed similar to the D412-702-043B kit, as detailed in Table 1 of this service instruction.

The Dart D412-702-345 4-Man Shoulder Harness Kit provides 3-point harnesses with inertia reels and joined lap and shoulder belts for the 4 aft facing seating positions in the aircraft cabin. The kit also contains hardpoints for securing the harnesses. The harnesses for this kit meet the requirements of TSO-C114 and replace the existing lap belts. This kit should be installed similar to the D412-702-045B kit, as detailed in Table 1 of this service instruction.

The Dart D412-702-347 4-Man Shoulder Harness Kit provides 3-point harnesses with inertia reels and joined lap and shoulder belts for the 4 side facing seating positions in the aircraft cabin. The kit also contains hardpoints for securing the harnesses. The harnesses for this kit meet the requirements of TSO-C114 and replace the existing lap belts. This kit should be installed similar to the D412-702-047B kit, as detailed in Table 1 of this service instruction.

The Dart D412-702-349 1-Man Shoulder Harness Kit provides a 3-point harness with an inertia reel and joined lap and shoulder belts for the center forward facing seating position in the aircraft cabin. The kit also contains hardpoints for securing the harness. The harness for this kit meets the requirements of TSO-C114 and replaces the existing lap belts. This kit should be installed similar to the D412-702-049B kit, as detailed in Table 1 of this service instruction.

The Dart D412-702-351 1-man 3-point shoulder harness kits are available for the outboard seats of the 5-man forward facing bench in Bell 205/212/214/412 model aircraft. The kit can be installed LH or RH. These kits should be installed similar to the D412-702-051B-052B kits, as detailed in Table 1 of this service instruction.

The Dart D214-702-337 5-Man Aft Facing Shoulder Harness Kit provides 3-point harnesses with inertia reels and joined lap and shoulder belts for the 5-man aft facing seat installed in the Bell 214B/B1 model aircraft. This kit should be installed similar to the D214-702-037B kit, as detailed in Table 1 of this service instruction.

The Dart D205-702-353 4-Man Aft Facing Shoulder Harness Kit provides 3-point harnesses with inertia reels and joined lap and shoulder harnesses for the 4-man aft facing seat installed in the UH-1 model aircraft. This kit should be installed similar to the D205-702-053B kit, as detailed in Table 1 of this service instruction.

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DAO # 01-O-01	
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BY:	D. SHEPHERD (DE # 02)
DATE:	10.03.22
CERT. NO.:	SH04-7
ISSUE NO.:	3

A	NEW ISSUE		CP	10.03.18
REV.	DESCRIPTION		BY	DATE
DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	REV. A SHEET 1 OF 6	
DRAWN				
CHECKED				
MFG. APPR.	N/A			
APPROVED				
DE APPR.				
DATE	10.03.18		SCALE	NTS
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INSTALLATION

The Dart D412-702-3XX kits should be installed similar to the kits in Installation Instructions IIN-D412-702 Rev. E or Dart Service Instruction (DSI) listed below:

TABLE 1

Part Number	Description	Install similar to:
D412-702-341	Shoulder Harness Kit	D412-702-041B (IIN-D412-702, DSI 9408)
D412-702-343	Shoulder Harness Kit	D412-702-043B (IIN-D412-702, DSI 9453 [214], DSI 9408)
D412-702-345	Shoulder Harness Kit	D412-702-045B (IIN-D412-702, DSI 9469)
D412-702-347	Shoulder Harness Kit	D412-702-047B (IIN-D412-702, DSI 9408)
D412-702-349	Shoulder Harness Kit	D412-702-049B (IIN-D412-702, DSI 9408)
D412-702-351	Shoulder Harness Kit	D412-702-051B (LH) (DSI 9397, DSI 9408) D412-702-052B (RH) (DSI 9397, DSI 9408)
D214-702-337	Shoulder Harness Kit	D214-702-037B (DSI 9454)
D205-702-353	Shoulder Harness Kit	D205-702-053B (DSI 9460)
D412-702-301	Harness Assembly	D412-702-101B (IIN-D412-702)
D412-702-303	Harness Assembly	D412-702-103B (IIN-D412-702)
D412-702-305	Harness Assembly	D412-702-105B (IIN-D412-702)
D412-702-307	Harness Assembly	D412-702-107B (IIN-D412-702)
D412-702-309	Harness Assembly	D412-702-109B (IIN-D412-702)
D412-702-311	Harness Assembly	D412-702-111B (IIN-D412-702)
D412-702-313	Harness Assembly	D412-702-113B (IIN-D412-702)
D412-702-315	Harness Assembly	D412-702-115B (IIN-D412-702)
D412-702-317	Harness Assembly	D412-702-117B (IIN-D412-702)
D412-702-319	Harness Assembly	D412-702-119B (DSI 9454)
D412-702-321	Harness Assembly	D412-702-121B (DSI 9454, DSI 9469)
D412-702-323	Harness Assembly	D412-702-123B (DSI 9454, DSI 9469)

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DESIGN	<i>97</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. DSI 9511 REV. A SHEET 2 OF 6 TITLE NEW SHOULDER HARNESS KITS NTS
DRAWN	<i>97</i>	
CHECKED	<i>3</i>	
MFG. APPR.	N/A	
APPROVED	<i>100</i>	
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W0 38471
PARTS LIST

TABLE 2

QTY -341	QTY -343	QTY -345	QTY -347	QTY -349	QTY -351	Part Number	Description
X						D412-702-341	Dart 13-Man 3-Point Shoulder Harness Kit
	X					D412-702-343	Dart 5-Man 3-Point Forward Facing Shoulder Harness Kit
		X				D412-702-345	Dart 4-Man 3-Point Aft Facing Shoulder Harness Kit
			X			D412-702-347	Dart 4-Man 3-Point Side Facing Shoulder Harness Kit
				X		D412-702-349	Dart 1-Man 3-Point Forward Shoulder Harness Kit
					X	D412-702-351	Dart 1-Man 3-Point Shoulder Harness Kit
1	1			1	1	D412-702-059	GROMMET KIT
9	5			4	1	D3761-1-041	HOOK AND LOOP STRIP (DSI 9408)
2	1			1		D412-702-301	HARNESS ASSEMBLY (NEW)
1*	1*			1*		D3573-7	ADAPTER
1*	1*			1*		D4088-041	SHOULDER HARNESS (NEW)
4*	4*			4*		MS24693S272	SCREW
4*	4*			4*		AN960JD10LL	WASHER
4*	4*			4*		MS21042L3	NUT
2	1			1		D412-702-303	HARNESS ASSEMBLY (NEW)
1*	1*			1*		D3573-8	ADAPTER
1*	1*			1*		D4088-041	SHOULDER HARNESS (NEW)
4*	4*			4*		MS24693S272	SCREW
4*	4*			4*		AN960JD10LL	WASHER
4*	4*			4*		MS21042L3	NUT
1	1			1		D412-702-305	HARNESS ASSEMBLY (NEW)
1*	1*			1*		D3573-1	ADAPTER
1*	1*			1*		D4088-041	SHOULDER HARNESS (NEW)
4*	4*			4*		MS24693S273	SCREW
4*	4*			4*		AN960JD10LL	WASHER
4*	4*			4*		MS21042L3	NUT
1	1			1		D412-702-307	HARNESS ASSEMBLY (NEW)
1*	1*			1*		D3573-3	ADAPTER
1*	1*			1*		D4088-041	SHOULDER HARNESS (NEW)
4*	4*			4*		MS24693S272	SCREW
4*	4*			4*		AN960JD10LL	WASHER
4*	4*			4*		MS21042L3	NUT
1	1					D412-702-309	HARNESS ASSEMBLY (NEW)
1*	1*					D3573-3	ADAPTER
1*	1*					D4088-041	SHOULDER HARNESS (NEW)
4*	4*					MS24693S272	SCREW
4*	4*					AN960JD10LL	WASHER
4*	4*					MS21042L3	NUT

* denotes that part is included in assembly above

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DESIGN	97	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN	99	
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MFG. APPR.	N/A	DSI 9511
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DATE	10.03.18	NTS
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Wb 54uM1
...continued from previous page

QTY -341	QTY -343	QTY -345	QTY -347	QTY -349	QTY -351	Part Number	Description
1		1				D412-702-311	Harness Assembly (New)
1*		1*				D3570-1	Bracket
1*		1*				D4088-043	Shoulder Harness (New)
4*		4*				MS24694S50	Screw
4*		4*				AN960JD10L	Washer
4*		4*				MS21042L3	Nut
1		1				D412-702-313	Harness Assembly (New)
1*		1*				D3570-2	Bracket
1*		1*				D4088-043	Shoulder Harness (New)
4*		4*				MS24694S50	Screw
4*		4*				AN960JD10L	Washer
4*		4*				MS21042L3	Nut
1		1				D412-702-315	Harness Assembly (New)
1*		1*				D3573-5	Adapter
1*		1*				D4088-041	Shoulder Harness (New)
4*		4*				MS24693S272	Screw
4*		4*				AN960JD10LL	Washer
4*		4*				MS21042L3	Nut
1		1				D412-702-317	Harness Assembly (New)
1*		1*				D3573-5	Adapter
1*		1*				D4088-041	Shoulder Harness (New)
4*		4*				MS24693S272	Screw
4*		4*				AN960JD10LL	Washer
4*		4*				MS21042L3	Nut
1		1				D412-702-321	Harness Assembly (New)
1*		1*				D3570-3	Bracket
1*		1*				D4088-043	Shoulder Harness (New)
4*		4*				MS24694S50	Bolt
4*		4*				AN960JD10L	Washer
4*		4*				MS21042L3	Nut
1		1				D412-702-323	Harness Assembly (New)
1*		1*				D3570-4	Bracket
1*		1*				D4088-043	Shoulder Harness (New)
4*		4*				MS24694S50	Bolt
4*		4*				AN960JD10L	Washer
4*		4*				MS21042L3	Nut

* denotes that part is included in assembly above

continued next page...

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DATE:	10.03.22
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ISSUE NO.:	3

DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN		
CHECKED		DRAWING NO. DSI 9511
MFG. APPR.	N/A	
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...continued from previous page

QTY -341	QTY -343	QTY -345	QTY -347	QTY -349	QTY -351	Part Number	Description
2	2					D3542-1	BRACKET
7	3		4	1		D3571-1	GUIDE
2	2					D3571-3	GUIDE
2		2				D3572-041	GUIDE ASSEMBLY
12	6		6	2		D3578-041	DOUBLER
2	2					D3610-041	BRACKET
2	2					D3618-1	CAP
4	4					AN4-10A	BOLT
2		2				AN4-16A	BOLT
4		4				AN4-25A	BOLT
4		4				AN4-27A	BOLT (DSI 9469)
2	2					AN4-44A	BOLT
2	2					MS24693S274	SCREW
3	3			1		MS24694S56	SCREW
10	2		8			MS24694S58	SCREW
1	1			1		MS24694S60	SCREW
26	6	20				AN960JD416	WASHER
4	4					AN960JD416L	WASHER
12	6	6				MS21042L4	NUT
24	12		12	4		CR3212-4-4	RIVET

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DRAWN	99	
CHECKED	8	DRAWING NO. DS1 9511
MFG. APPR.	N/A	
APPROVED	<i>[Signature]</i>	REV. A SHEET 5 OF 6
DE APPR.	<i>[Signature]</i>	
DATE	10.03.18	SCALE NTS NEW SHOULDER HARNESS KITS COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

TABLE 3

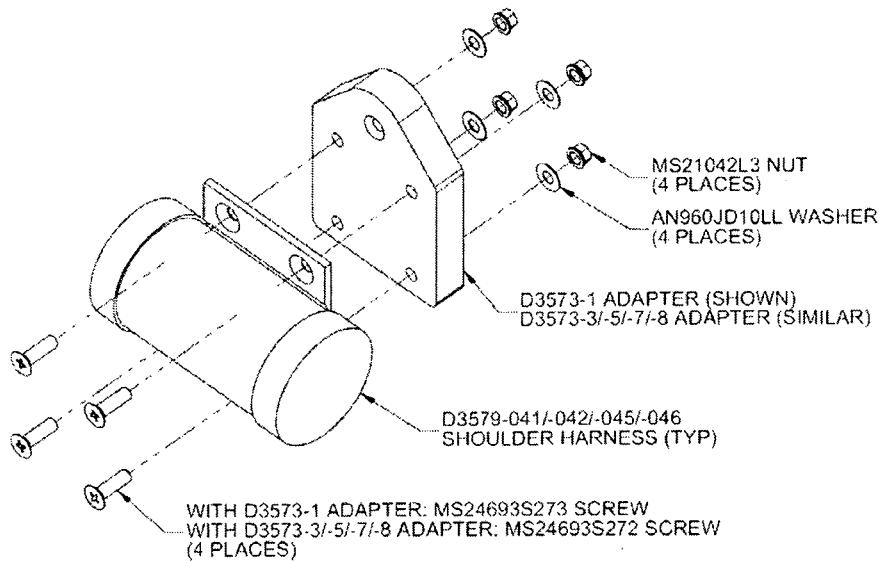
QTY -337	QTY -353	Part Number	Description
X		D214-702-337	Dart 5-Man 3 Point Aft Facing Shoulder Harness Kit, for 214 Aircraft
	X	D205-702-353	Dart 4-Man 3 Point Aft Facing Shoulder Harness Kit, for UH-1 Aircraft
1	2	D412-702-311	HARNESS ASSEMBLY (NEW) -- SEE TABLE 2
1	2	D412-702-313	HARNESS ASSEMBLY (NEW) -- SEE TABLE 2
1		D412-702-321	HARNESS ASSEMBLY (NEW) -- SEE TABLE 2
1		D412-702-323	HARNESS ASSEMBLY (NEW) -- SEE TABLE 2
1		D412-702-319	HARNESS ASSEMBLY (NEW)
1*		D3925-041	BRACKET
1*		D4088-043	SHOULDER HARNESS ASSEMBLY (NEW)
4*		MS24694S50	BOLT
4*		AN960JD10L	WASHER
4*		MS21042L3	NUT
	1	D3572-043	GUIDE ASSY
	1	D3572-044	GUIDE ASSY
1		D3920-041	SEATBELT GUIDE ASSEMBLY
2		D3920-5	SEATBELT GUIDE
1	6	AN4-16A	BOLT
1		AN4-21A	BOLT
7		AN4-25A	BOLT
18	12	AN960JD416	WASHER
9	6	MS21042L4	NUT

* denotes that part is included in assembly above

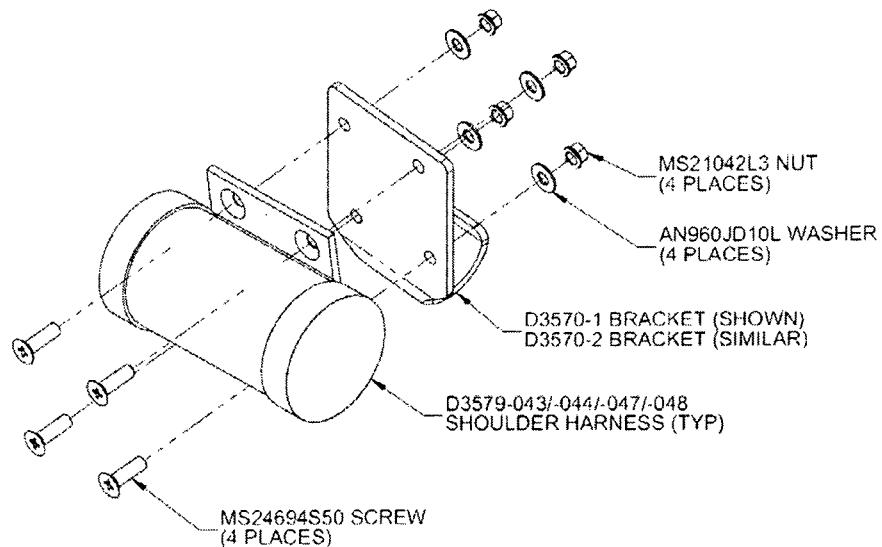
W10 5/9/11

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BRANCH	
DAO # 01-O-01	
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BY:	
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DATE:	10.03.22
CERT. NO.:	SH04-7
ISSUE NO.:	3

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DRAWN	99	
CHECKED	99	DRAWING NO. REV. A
MFG. APPR.	N/A	DSI 9511 SHEET 6 OF 6
APPROVED		TITLE
DE APPR.		SCALE
DATE	10.03.18	NEW SHOULDER HARNESS KITS NTS
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DETAIL 'K' D412-702-101A/-103A/-105A/-107A/-109A/-115A/-117A AND
D412-702-101B/-103B/-105B/-107B/-109B/-115B/-117B HARNESS ASSEMBLIES
(BELTS, K6.2 CLIP AND D3569-1/-2/-3 DECAL NOT SHOWN)



DETAIL 'L' D412-702-111A/-111B/-113A/-113B HARNESS ASSEMBLIES
(BELTS AND D3569-1/-2/-3 DECALS NOT SHOWN)

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